Flood Risk Management Agent Based Modeling using ODD Protocol - Methodology

Group Number: 08
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August 25, 2024

1 Individual Contributions

1. U. Suventhiran: In our Flood Risk Management agent-based modeling project, i contributed a problem identification application of the ABM model, a basic model and simulated use of the ODD protocol overview, detailed concepts, and also a netlogo-simulated part. The written parts of reports include an overview of the ODD protocol as well as detailed concepts and readme file. The last report, written parts are Introduction and Methodology.

2. Rashmi Pabodha: In the Flood Risk Management agent-based modeling project, I contributed to coding the model using NetLogo and also contributed to its development in AnyLogic. I was responsible for writing a detailed explanation of the design concept for the ODD protocol report, including figures that showed agent interactions and decision-making process. For the final report I handled the result and discussion sections including summary table of the results and relevant graph of the model results. I also contributed to conducting a sensitivity analysis and performed a literature review on existing research in flood risk management at the beginning of the project.

3. Irusha Perera: In my work on the Flood Risk Management agent-based modeling project, I am helping to develop the project concept. In the initial stages of the project, I assisted with a sensitivity analysis and carried out a review of the existing literature on flood risk management research. I was involved in coding the model using NetLogo and also contributed to its development in AnyLogic. I collected data to write about interactions, stochasticity, collectives, and observations for the report. I have finished parts of the final report, including the abstraction and the conclusion.